To: Swenson, Peter[swenson.peter@epa.gov]; Melgin, Wendy[melgin.wendy@epa.gov]; Burdick,

Melanie[Burdick.Melanie@epa.gov]; Pallesen, Reginald A.[pallesen.reginald@epa.gov]

From: Korleski, Christopher
Sent: Mon 4/23/2018 1:39:23 PM

Subject: FW: Aquila Resources - Clarification

FYI -

From: Donohue, Steve [mailto:Steve.Donohue@Foth.com]

**Sent:** Monday, April 23, 2018 6:28 AM

**To:** Korleski, Christopher <korleski.christopher@epa.gov>

Cc: Barry Hildred (BHildred@aquilaresources.com) <BHildred@aquilaresources.com>; dennis donohue (ddonohue@wnj.com)

<ddonohue@wnj.com>; Nimmer, Mike <Mike.Nimmer@Foth.com>; jking@king-macgregor.com

Subject: Aquila Resources - Clarification

Good morning Chris,

During the April 16, 2018 meeting, the EPA requested additional clarification to Aquila's response to Comment #4 in the March 8, 2018, EPA letter regarding the potential for Menominee River draw down. Aquila offers the following clarification to that response:

The estimate of 125,000 gpd (or 0.193 cubic feet per second [cfs]) of flow through the cut-off wall was a preliminary analytical estimate contained in what is referred to as the "Cut-off Wall Memorandum" prepared prior to preparation of the Michigan Department of Environmental Quality (MDEQ) Part 632 Mining Permit Application. As documented in the Groundwater Modeling Report that was submitted with the Part 632 permit application, actual groundwater modeling predicted the maximum pit in-flow to be approximately twice that amount, at 38 m³/hr (0.370 cfs). While groundwater in-flow will occur around the entire pit circumference, the assumption that it could be entirely derived from the Menominee River provides for a conservative estimate with respect to potential drawdown effects on the river. As documented in the Groundwater Modeling Report, MDEQ Menominee River records show that the 90-day, 10-year low flow estimate in the River is 1,370 cfs. Therefore, the estimated flow into the pit (if conservatively assumed to come entirely from the Menominee River) would be equivalent to 0.027% of the 90-day, 10-year Menominee River low flow (i.e. 0.37 cfs / 1,370 cfs = 0.027%), a relatively negligible amount as compared to the total flow in the River, and therefore adverse drawdown impacts to the Menominee River are not anticipated.

Best regards,

Steve

Stephen V. Donohue, PH Vice President - Mining

## Foth Infrastructure & Environment, LLC

2121 Innovation Court, Suite 300 P.O. Box 5126 De Pere, WI 54115-5126 Ph: (920) 497-2500

Direct: (920) 496-6806 Cell: (920) 562-0324 http://www.foth.com



Go Green, keep it on the screen. Please do not print this email unless necessary.

This communication including any attachments, (E-mail) is confidential and may be proprietary, privileged or otherwise protected from disclosure. If you are not the intended recipient, please notify the sender, permanently delete this E-Mail from your system and destroy any copies. Any use of this E-Mail, including disclosure, distribution or replication, by someone other than its intended recipient is prohibited.

This E-Mail has the potential to have been altered or corrupted due to transmission or conversion. It may not be appropriate to rely upon this E-Mail in the same manner as hardcopy materials bearing the author's original signature or seal.